

# The IP Address & Identity Disconnect



Lori MacVittie, 2010-04-03

*The advent of virtualization brought about awareness of the need to decouple applications from IP addresses. The same holds true on the client side – perhaps even more so than in the data center.*



I could quote [The Prisoner](#), but that would be so cliché, wouldn't it? Instead, let me ask a question: just which IP address *am* I? Am I the one associated with the gateway that proxies for my mobile phone web access? Or am I the one that's currently assigned to my laptop – the one that will change tomorrow because today I am in California and tomorrow I'll be home? Or am I the one assigned to me when I'm connected via an SSL VPN to corporate headquarters?

If you're tying identity to IP addresses then you'd better be a psychiatrist in addition to your day job because most users have multiple IP address disorder.

IP addresses are often utilized as part of an identification process. After all, a web application needs *some* way to identify a user that's not supplied by the user. There's a level of trust inherent in the IP address that doesn't exist with my name or any other user-supplied piece of data because, well, it's *user* supplied. An IP address is assigned or handed-out dynamically by what is an unemotional, uninvolved technical process that does not generally attempt to deceive, dissemble, or trick anyone with the data. An IP address is simply a number.

But given the increasingly dynamic nature of data centers, of cloud computing, and of users accessing web-based services via multiple devices – sometimes at the same time – it seems a bad idea to base any part of identification on an IP address that could, after all, change in five minutes. IP addresses are no longer guaranteed in the data center, that's the premise of much of the work around IF-MAP and dynamic connectivity and Infrastructure 2.0, so why do we assume it would be so on the client side? Ridonculous!

The decoupling of IP address from identity seems a foregone conclusion. It's simply not useful anymore. Add to this the fact that IP address depletion truly is a serious problem – the [NRO announced recently that less than 10% of all public IPv4 addresses are still available](#) – and it seems an appropriate time to decouple application and infrastructure from relying on client IP addresses as a form of identification.

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